



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/063,289	04/21/1998	REJEAN GAGNE	T8463785US	4185

26643 7590 12/05/2003

PETER J. GORDON, PATENT COUNSEL
AVID TECHNOLOGY, INC.
ONE PARK WEST
TEWKSBURY, MA 01876

EXAMINER

BASHORE, WILLIAM L

ART UNIT	PAPER NUMBER
----------	--------------

2176

DATE MAILED: 12/05/2003

26

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/063,289

Applicant(s)

GAGNE, REJEAN

Examiner

William L. Bashore

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 25
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to communications: RCE filed 9/8/2003 to the original application filed 4/21/1998, IDS filed 12/20/1999 as paper 3, 1/21/2003 as paper 21, and 9/11/2003 as paper 25.
2. Claims 1-11 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Boezeman and Hamakawa.
3. Claims 1-11 are pending. Claims 1, 4, 11 are independent claims.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/8/2003 has been entered.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boezeman et al. (hereinafter Boezeman), U.S. Patent No. 5,889,514 filed 3/29/1996 and issued 3/30/1999, in view of Hamakawa et al. (Hereinafter Hamakawa), Object composition and playback models for handling multimedia data, ACM Proceedings of the conference on Multimedia '93, August 2-6, 1993, pp.273-281.

In regard to independent claim 1, Boezeman teaches:

- time based data of at least two differing data types (Boezeman Figure 7 items “Animation”, “AudioPlay”, “VideoPlay”; compare with claim 1 preamble *“A method for accessing....comprising the steps of”*).
- selecting and positioning a first clip object representing a first selected time-based data source, with respect to a relative time line, said clips are of differing types, said relative time lines associated with global and local time lines (Boezeman, Figure 10 item 124, column 8 lines 15-20; compare with claim 1 *“selecting a first time-based data source comprising a first data type from a selection of available data sources”*, and *“positioning a first clip object....for accessing the first time-based data source”*).
- selecting and positioning a second data-clip, comprising a different data type as compared to said first selected time-based data source (Boezeman, Figure 10 item 140, column 8 lines 15-20; compare with claim 1 *“selecting a second time-based data source....a different data type than the first time-based data source”*, and *“positioning a second clip object....for accessing the second time-based data source”*).
- one or more source clips and spacers positioned in an editable graphical object utilizing start and duration times (rT and aT), said positioning relative both to each other (rT), as well as to a global time line (aT) (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 1 *“creating at least one meta-clip object representing....distinct from the local time line”*). - Boezeman does not specifically teach said objects re-mapped to a global time line subsequent to repositioning of a meta-object. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own relative time line, temporally re-mapped with respect to a global time line in a box, utilizing “temporal glue” recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. Also see p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 1 *“such that the start time and duration of each of said....on the global time line”*). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa’s taught advantage of automatic temporal re-mapping of time lines within groupings

(meta-clips) of multimedia objects, providing increased convenience (due to the elimination for precise time line locations), to Boezeman's NLE editor (Hamakawa p.277 column 2, near bottom).

- clip data which can be selected and used as needed (Boezeman Figure 2). Boezeman does not specifically teach incorporation of a meta-clip to a list of available resources. However, Hamakawa teaches a method incorporating a group of multimedia objects (Hamakawa p.275 Figure 4; compare with claim 1 "*adding the at least one meta-clip object to said list of available data sources*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchically categorized composite objects, providing an increased number of object groupings to be used by Boezeman's NLE system.

In regard to dependent claim 2, Boezeman does not specifically teach a method of incorporating a meta-clip object in cooperation with other objects, whereby said objects within a meta-clip object are mapped to said meta-clip object, and in turn, mapped to a global time line. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own relative time line, temporally re-mapped with respect to a global time line in a box, utilizing "temporal glue" recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. See also p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 2). In addition, Hamakawa incorporates said composite objects within other composite objects in the form of a composite hierarchy, whereby all relative time lines are re-calculated as needed (Hamakawa p.274 Figure 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchical temporal re-mapping of time lines within groupings of multimedia composite objects, providing increased convenience (due to the elimination for precise time line locations - Hamakawa p.277 column 2, near bottom) to Boezeman's NLE method.

In regard to dependent claim 3, Boezeman teaches incorporating effects such as play spacers, hide spacers, and move spacers, which can be positioned and manipulated within the invention as taught by

Boezeman (Boezeman column 2 lines 49-53; compare with claim 3). Claim 3 would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Boezeman, because of Boezeman's taught advantage of editable spacer effects, which in turn are examples of special effects applied to media editing systems (NLE) as taught by Boezeman.

In regard to independent claim 4, Boezeman teaches:

- teaches positioning of a first clip object representing a first selected time-based data source, with respect to (and associated with) global and local time lines, incorporating a start/duration time (Boezeman, Figure 10 items 124, 140, column 8 lines 15-20; compare with claim 4 "*creating at least one meta-clip object*", and 4 "*a first clip object representing a first time based data source selected from a list of available data sources, and a second clip object representing a second time based data source selected from the list of available data sources*").

- selection and positioning of a second data-clip, comprising a different data type as compared to said first selected time-based data source, and with start/stop times (Boezeman, Figure 10 items 124, 140, column 8 lines 15-20; compare with claim 4 "*the second data source being of a different data type than the first data source*", and 4 "*a respective start time and duration* ").

- one or more source clips and spacers positioned in an editable graphical object utilizing start and duration times (rT and aT), said positioning relative both to each other (rT), as well as to a global time line (aT) (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 4 "*a respective local time line distinct from the global time line*", and 4(I) "*clip objects being positioned relative to the local time line*").

- Boezeman does not specifically teach a method of incorporating at least one meta-clip to a list of available resources. However, Hamakawa teaches a method incorporating a group of multimedia objects (Hamakawa p.275 Figure 4; compare with claim 4 "*adding said at least one meta-clip object to the list of available data sources*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchically

categorized composite objects, providing an increased number of object type groupings to be used by the NLE system as taught by Boezeman.

- one or more source clips are positioned in an editable graphical object utilizing relative start and duration times, and with said positioning relative both to each other, as well as to an absolute time line (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 4 *“selecting at least one of the meta-clip objects from the list....the global time line”*).

- Boezeman does not specifically teach a method whereby said objects are positioned and re-mapped to a global time line according to respective local time lines. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own time line, temporally re-mapped with respect to a global time line in a box, utilizing “temporal glue” recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. Also see p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 4 *“re-mapping to the global time line the start time....relative to the global time line”*). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa’s taught advantage of automatic temporal re-mapping of time lines within groupings of multimedia objects, providing increased convenience (due to the elimination for precise time line locations, (Hamakawa p.277 column 2, near bottom) to the NLE method as taught by Boezeman.

In regard to dependent claim 5, claim 5 incorporates substantially similar subject matter as claimed in claim 2, and is rejected along the same rationale.

In regard to dependent claim 6, claim 6 incorporates substantially similar subject matter as claimed in claim 3, and is rejected along the same rationale.

In regard to dependent claim 7, claim 7 incorporates substantially similar subject matter as claimed in claim 3, and in further view of the following, is rejected along the same rationale.

Boezeman teaches incorporation of spacer effects, which can be positioned and manipulated within an edit track (Boezeman column 2 lines 47-58). Hill does not specifically teach a method of incorporating said effects to at least one meta-clip object. However Hamakawa teaches a method of composite objects incorporating media clips with relative time lines (Hamakawa p.275 Figure 4; compare with claim 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of composite objects, providing an additional object type (including tracks) for the incorporation of effects, as taught by Boezeman.

In regard to dependent claim 8, Boezeman does not specifically teach the use of operator(s) to modify data from each time-based data source in a meta-clip. However, Hamakawa teaches a method of a composite object "Box", incorporating a conglomeration of different media object types along with relative time lines assigned per said type, with said Box incorporated as a composite object within a hierarchy of objects (Hamakawa p.274 Figure 3, and p.275 Figure 4; compare with claim 8). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the Hamakawa to Boezeman, because of Hamakawa's taught advantage of composite objects, providing a conglomeration of track types available for the incorporation of effects, as taught by Boezeman.

In regard to dependent claim 9, Boezeman teaches a method of play spacers, hide spacers, and rate spacers, whereby a clip is shortened or lengthened, hidden and played when necessary (Boezeman column 2 lines 47-58; compare with claim 9).

In regard to dependent claim 10, claim 10 is rejected using the Examiner's argument and rationale as set forth in the rejection of claim 9.

In regard to independent claim 11, Boezeman teaches:

- a non-linear editing system comprising time based data of at least two differing data types (Boezeman Figure 7 items “Animation”, AudioPlay”, “VideoPlay”, also Abstract; compare with claim 11 “A non-linear editing system”, and “...time based data of at least two differing data types...”).

- an internal hard drive, a CPU, a display screen, and an input device (Boezeman Figure 1; compare with claim 11 “a storage device...”, “a computer operatively connected...”, “at least one output device...”, and “at least one input device...”).

-one or more source clips positioned in an editable graphical object utilizing relative start and duration times, with said positioning relative both to each other (local time lines), as well as to an absolute time line (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25, compare with claim 11 “a first object representing a first one of the stored data sources, a second object representing a second one”, and claim 11 “each comprising a respective local time line”, and 11 “clip objects are positioned on the local time line”).

- Boezeman does not specifically teach a method of incorporating a meta-clip object. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own relative time line (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. See also p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 11 “creating with the computer at least one meta-clip object”). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa’s taught advantage of composite objects, providing a way to hierarchically organize groups of tracks within Boezeman’s NLE editor.

- selecting and positioning a first clip object representing a first selected time-based data source, with respect to a relative time line, said clips are of differing types (Boezeman, Figure 10 item 124, column 8 lines 15-20; compare with claim 11 “the second data source being of a different data type than the first data source”, and 11 “a respective start time and duration ”).

- one or more source clips positioned in an editable graphical object utilizing relative start and duration times, and with said positioning relative both to each other, as well as to an absolute time line (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25 ; compare with claim 11 “*selecting with the computer at least one of the meta-clip objects*”).

- Boezeman does not specifically teach a method of using an NLE object in cooperation with other objects, whereby said objects are positioned and re-mapped to a global time line according to respective local time lines. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own time line, temporally re-mapped with respect to a global time line in a box, utilizing “temporal glue” recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. Also see p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 11 “*define with the computer....and said global time line*”). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to the method of Boezeman, because of Hamakawa’s taught advantage of automatic temporal re-mapping of time lines within groupings of multimedia objects, providing increased convenience (due to the elimination for precise time line locations, (Hamakawa p.277 column 2, near bottom) to the NLE method as taught by Boezeman.

Response to Arguments

7. Applicant's arguments filed 9/18/2002 (After Final Request for Reconsideration) have been fully and carefully considered but they are not persuasive.

Applicant argues on page 8 of the amendment that Hamakawa does not specifically teach presented timeline embodiments as shown in Hamakawa Figures 12, 14, and 16. It is respectfully noted that the slider bars present in Figures 12 and 16 are indicative of timelines, and all three figures utilize the underlying constructs of Hamakawa’s invention. The examiner applies Hamakawa’s relative timelines to Boezeman’s timelines to teach Applicant’s invention as presently claimed.

Applicant argues on pages 9-12 of the amendment that the combination of Hamakawa and Boezeman would replace Boezeman's timeline with the (meta-clip) object model of Hamakawa. Applicant also stresses that Hamakawa's invention involving relative locations are intended to replace a timeline system (i.e. the timelines of Boezeman). It is respectfully noted that Hamakawa's meta-clip object models throughout the various cited figures each reflect a "block" of time. The apparent lack of tick marks in some of these blocks does not diminish the fact that said blocks are timelines. Both Hamakawa and Boezeman are from the same general field of endeavor (multimedia editing using timelines), and adding Hamakawa's relative meta-clip timeline blocks to Boezeman's timelines would alter Boezeman at least to the extent of adding blocks of timelines (relative to each other) to Boezeman's display. Since Hamakawa's blocks are timelines, tick marks (reflecting precise timeline locations) in Boezeman can be added to each of Hamakawa's blocks relative to each other, and relative to a global timeline.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bashore whose telephone number is (703) 308-5807. The examiner can normally be reached on Monday through Friday from 11:30 AM to 8:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached on (703) 305-9792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Art Unit: 2176

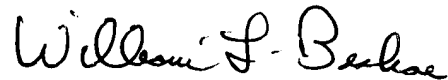
9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703-872-9306) (for formal/after-final communications intended for entry)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Fourth Floor (Receptionist).



William L. Bashore
Patent Examiner, AU 2176
November 25, 2003